

INTERIM POLICY ON THE USE OF NON-NASA AIRCRAFT TO SUPPORT NASA REQUIREMENTS.

Background: NASA has a responsibility to ensure that all aircraft which conduct flight operations with NASA personnel or equipment on board meet approved airworthiness and operational safety standards. This responsibility is specified in NPD 7900.4, NASA Aircraft Operations Management:

Para 1.b. "All NASA aircraft operations will meet approved programmatic needs and mission management requirements, be duly authorized, and be accomplished in airworthy aircraft by qualified flight crews in accordance with approved operational procedures. NASA will comply with applicable Federal guidelines and regulations."

Para 1.c. "Policies and procedures will be established by affected NASA Centers for initiation, review, approval, and implementation of all flight programs. Procedures will be established at each Center and aircraft operations facility, including Headquarters, to comply with the NASA and Federal Aviation Administration (FAA) airworthiness, and safety/flight readiness review policies and procedures."

Para. 5.j. "Managers at all levels are responsible for the safe conduct of aircraft operations under their control. All aviation-related contracts require compliance with aviation safety program requirements."

Purpose: This letter provides specific guidelines to help Centers develop procedures which will ensure that any non-NASA aircraft conducting flight operations for NASA meets these requirements.

General Policy: All NASA-conducted or NASA-sponsored aviation operations, including research or scientific projects which use aviation assets, are the responsibility of the NASA flight operations office at the Center that is responsible for those projects

Basing Conditions: If flights are conducted at a NASA Center other than the home Center, a written agreement will be created between the two flight operations offices. If the project is managed by a Center without a flight operations office, support from another Center's flight operations office is required and that support will be coordinated by the Aircraft Management Office (AMO) through the Enterprises and the Intercenter Aircraft Operations Panel (IAOP).

Risk Analysis: The responsible flight operations office will ensure that a sufficiently detailed risk analysis of the flight program/project is conducted. The

analysis must evaluate the flight parameters of the program, the airworthiness of the aircraft, the capability of the aircraft to meet flight requirements, and the background and experience level of the operators. The analysis should also consider whether the personnel on board are mission crew or flight crew, whether the equipment is unique, high-value science equipment or standard production equipment, and whether the demands placed on the contractor expose it to risks beyond its capability to manage.

Review of Contracts and Memoranda of Agreement (MOAs): The responsible flight operations office will review all aviation-related contracts, MOAs, and other written agreements for compliance with NASA aviation safety program requirements prior to the award or execution of the contract, MOA, or agreement. The initial aviation program analysis should be done during the planning stage prior to issuing a Request for Proposal (for contractual arrangements) or entering into other binding agreements. The flight operations office will evaluate the capabilities of the potential operators prior to their selection.

NASA flight programs: NASA flight programs will be conducted under guidelines which will vary depending upon who owns or operates the aircraft:

- 1. NASA-owned or NASA-operated aircraft:** Any aircraft owned or operated by NASA will be subject to the Center's airworthiness certification process, and the flight program will be subject to the Center's mission or flight review process. If the NASA aircraft is operated by a NASA Center other than the owning Center, responsibilities for flight safety, airworthiness, and mission review will be established by a written agreement between the respective Center Flight Operations organizations.
- 2. NASA-owned, military-operated:** If a NASA aircraft is operated for NASA by the U.S. military, the owning NASA Center's flight operations office will conduct a risk analysis to determine whether NASA or military standards for airworthiness, operations, maintenance, and safety should apply. Responsibilities will be established by written agreement between the military unit operating the aircraft and the flight operations office at the NASA Center which owns the aircraft.
- 3. Military-owned and military-operated:** If NASA equipment or personnel are required to be aboard a military owned and operated research or research support aircraft, and operated at a NASA Center, responsibilities and tasks will be established by written agreement between the military unit with operational responsibility for the aircraft, and the flight operations office at the NASA Center where the flight operations are to be conducted. If the operation is not conducted at a NASA Center, the agreement will be signed by the head of flight operations at the Center that manages the project.

- 4. Federal or State Agency-owned and -operated:** If the aircraft is owned by another Federal or State agency (including State Universities) and operated for NASA, that agency must have a formal aviation program with written standards which describe a complete flight program, including management, administration, operations, maintenance, modifications, airworthiness, safety, and training. Those standards must be related to, and address the risks associated with the types of operations that the aircraft will perform. The flight operations office at the NASA Center responsible for the flight project will conduct the risk analysis and evaluate the capabilities of the agency. If that Center has no flight operations office, support from another Center's flight operations office is required. The AMO will coordinate the evaluation and analysis through the Enterprises and the IAOP. If the Federal or State agency's operation has been previously evaluated by an Interagency Committee for Aviation Policy (ICAP) Aviation Resource Management Survey Team, the Center flight operations office may use the results of that survey for its evaluation. If the Federal or State agency is expected to provide long-term, continuous support (greater than one year), the agency's aviation program will be subject to the IAOP Review process in the same manner as NASA Centers.
- 5. Contractor-owned and Contractor-operated:** If the aircraft is owned by a contractor and operated for NASA under a Federal Aviation Administration (FAA) Operating Certificate (such as Federal Aviation Regulation [FAR] Part 119, 121, 125, 133, 135.) as a civil aircraft, the aircraft will be operated in accordance with the appropriate FARs and within the limitations imposed by the Operating Certificate. Prior to contract award, a risk analysis will be conducted by the flight operations office at the NASA Center that manages the contract. The risk analysis will include a review of the terms of the contract, the risks to NASA, the hazards associated with the proposed flight operation, the airworthiness of the aircraft, and the capabilities of the contractor. The results of the risk analysis shall be incorporated into the contractor selection process. At least one NASA flight operations officer shall be a member of the selection board or team. If the Center has no flight operations office, support from another NASA flight operations office will be coordinated by the AMO through the Enterprises and the IAOP.

 - a. If the contractor's aircraft has an FAA Standard Airworthiness Certificate with appropriate maintenance/configuration documentation showing satisfactory condition, and if the risk analysis permits, the reviewers may accept the condition of the aircraft as documented.
 - b. If the aircraft has a Limited or Restricted Category Certificate, the operation must be restricted to the limitations imposed by the certificate, and if the risk analysis permits, the reviewers may accept the condition of the aircraft as documented.

- c. If the aircraft has an Experimental or Provisional Certificate, the configuration and airworthiness must be reviewed and approved by a formal NASA airworthiness certification program.
- d. If the Contractor-owned aircraft has no FAA Certificate, the aircraft configuration and airworthiness must be reviewed and approved by a formal NASA airworthiness certification program.

Table of conditions:

Owner	Operator	Airworthiness Standards/Review	Program Review Requirements
NASA owned	NASA operated	NASA/AFSRB	FRR
NASA owned	Any operator	NASA/AFSRB	FRR
Any owner	NASA operated	NASA/AFSRB	FRR
Mil owned	Mil operated	per MOA/Agreement	FRR
Fed owned	Fed Operated (ICAP)	FED Agency/MOA	FRR
Fed owned	Fed operated (non-ICAP)	FED Agency/AFSRB	FRR
Fed owned	Civil operated - public	NASA/AFSRB	FRR
Civil owned	Civil operated - public	NASA/AFSRB	FRR
Civil owned	Civil operated - civil	FAA A/W Cert. + FAA Ops Cert.	FRR